

### In the Claims

1-16. (Cancelled)

17. (Currently Amended) A computer-implemented method for using a contract object to coordinate relationships between multiple objects, comprising:

~~identifying selecting a first-object file;~~  
~~identifying selecting a second-object collection;~~  
determining a relationship between the ~~first-object file~~ and the ~~second-object collection~~;  
~~using the creating a contract object to represent the relationship between the first-object file and the second-object collection, the contract object comprising a contract object identifier, a locator for the file, metadata for the file, and a locator for the collection;~~  
~~storing within a transaction log a first entry and a second entry, the first entry representing creation of the contract object and the second entry representing a user request for the creation;~~  
~~determining a first event that can occur to at least the file;~~  
associating a first rule with the contract object, the first rule including ~~[[a]]~~ the first event  
~~that can occur to the first-object~~ and a first action;  
receiving the first event occurring to the file;  
accessing the first rule associated with the contract object; and  
updating at least one of the contract object, the file, and the ~~second-object collection~~  
according to the first action responsive to the first event,  
wherein the contract object is created and used without participation by a user, the ~~first object file~~, or the ~~second-object collection~~.

18. (Currently Amended) A computer-implemented method according to claim 17, wherein:

identifying a ~~first-object file~~ includes identifying a plurality of ~~first-objects files~~;  
determining a relationship includes determining a plurality of relationships between each of the ~~first-objects files~~ and the ~~second-object collection~~; and

using creating the contract object includes ~~using creating~~ a plurality of contract objects to represent the plurality of relationships between the plurality of ~~first-objects~~ files and the ~~second object~~ collection.

19. (Currently Amended) A computer-implemented method according to claim 18, wherein each contract object represents the relationship between exactly one of the plurality of ~~first-objects~~ files and the ~~second-object~~ collection.

20. (Currently Amended) A computer-implemented method according to claim 17, wherein:

identifying a ~~first-object~~ file includes identifying a plurality of ~~first-objects~~ files;

identifying a ~~second-object~~ collection includes identifying a plurality of ~~second-objects~~ collections;

determining a relationship includes determining a plurality of relationships between the plurality of ~~first-objects~~ files and the plurality of ~~second-objects~~ collections; and

using creating the contract object includes using creating a plurality of contract objects to represent the plurality of relationships between the plurality of ~~first-objects~~ files and the plurality of ~~second-objects~~ collections.

21. (Currently Amended) A computer-implemented method according to claim 20, wherein each contract object represents the relationship between exactly one of the plurality of ~~first-objects~~ files and exactly one of the plurality of ~~second-objects~~ collections.

22. (Cancelled)

23. (Currently Amended) A computer-implemented method according to claim ~~[[22]]~~ 17, wherein:

~~storing a first~~ the locator for the file includes:

~~assigning a first identifier~~ assigned to the ~~first-object~~ file; and

~~storing the first identifier in the contract object; and~~

~~storing a second~~ the locator for the collection includes:

~~assigning a second identifier assigned to the collection, ~~second object~~; and  
storing the second identifier in the contract object.~~

24. (Cancelled)

25. (Cancelled)

26. (Currently Amended) A computer-implemented method according to claim 17, further comprising associating a second rule with the contract object, the second rule including a second event that can occur to the ~~second object~~ collection and a second action.

27. (Cancelled)

28. (Currently Amended) A computer-implemented method according to claim 17, further comprising:

storing a ~~third~~ first locator for the contract object in the ~~first object~~ file; and  
storing a ~~fourth~~ second locator for the contract object in the ~~second object~~ collection.

29.-31. (Cancelled)

32. (Currently Amended) A computer-implemented method according to claim ~~[[72]]~~ 17, further comprising using at least one of the first and second entries~~[[y]]~~ to reconstruct the contract object after the contract object is lost.

33-43. (Cancelled)

44. (Currently Amended) Computer-readable media containing a program to use a contract object to coordinate relationships between multiple objects, the program comprising:

software to ~~identify~~ select a ~~first object~~ file;  
software to ~~identify~~ select a ~~second object~~ collection;

software to determine a relationship between the ~~first-object~~ file and the ~~second-object~~ collection;

software to use the contract object to represent the relationship between the ~~first-object~~ file and the ~~second-object~~ collection, the contract object comprising a contract object identifier, a locator for the file, metadata for the file, and a locator for the collection;

software to store within a transaction log a first entry and a second entry, the first entry representing creation of the contract object and the second entry representing a user request for the creation;

software to determine a first event that can occur to at least the file;

software to associate a first rule with the contract object, the first rule including ~~[[a]]~~ the first event ~~that can occur to the first-object~~ and a first action;

software to receive the first event occurring to the file;

software to access the first rule associated with the contract object; and

software to update at least one of the contract object, the file, and the ~~second-object~~ collection according to the first action responsive to the first event,

wherein the contract object is created and used without participation by a user, the ~~first-object~~ file, or the ~~second-object~~ collection.

45. (Currently Amended) Computer-readable media according to claim 44, wherein:  
the software to identify a ~~first-object~~ file includes software to identify a plurality of ~~first-objects~~ files;

the software to identify a ~~second-object~~ collection includes software to identify a plurality of ~~second-objects~~ collections;

the software to determine a relationship includes software to determine a plurality of relationships between the plurality of ~~first-objects~~ files and the plurality of ~~second-objects~~ collections; and

the software to use the contract object includes software to a plurality of contract objects to represent the plurality of relationships between the plurality of ~~first-objects~~ files and the plurality of ~~second-objects~~ collections.

46. (Currently Amended) Computer-readable media according to claim 45, wherein each contract object represents the relationship between exactly one of the plurality of ~~first objects~~ files and exactly one of the plurality of ~~second objects~~ collections.

47.-53. (Cancelled)

54. (Currently Amended) A computer-implemented method according to claim 17, wherein:

the first event includes a rename event; and

the first action includes an update to [[a]] the metadata ~~item~~ for the ~~first object~~ file in the contract object.

55-59. (Cancelled)

60. (Currently Amended) A computer-implemented method according to claim 26, further comprising:

receiving the second event;

accessing the second rule associated with the contract object; and

updating at least one of the contract object, the file, and the ~~first object~~ collection according to the second action responsive to the second event.

61. (Currently Amended) A computer-implemented method according to claim 60, wherein accessing the second rule includes selecting the second rule from a plurality of rules based on receiving the second event occurring to the ~~second object~~ collection.

62. (Currently Amended) Computer-readable media according to claim 44, wherein:  
the first event includes a rename event; and  
the first action includes an update of [[a]] the metadata ~~item~~ for the ~~first object~~ file in the contract object.

63-67. (Cancelled)

68. (Currently Amended) Computer-readable media according to claim 44, further comprising software to associate a second rule with the contract object, the second rule including a second event that can occur to the ~~second object~~ collection and a second action.

69. (Currently Amended) Computer-readable media according to claim 68, further comprising:

software to receive the second event;  
software to access the second rule associated with the contract object; and  
software to update at least one of the contract object, the file, and the ~~first object~~ collection according to the second action responsive to the second event.

70. (Currently Amended) Computer-readable media according to claim 69, wherein the software to access the second rule includes software to select the second rule from a plurality of rules based on receiving the second event occurring to the ~~second object~~ collection.

71. (Cancelled)

72. (Cancelled)

73. (Currently Amended) A computer-implemented method according to claim 72, further comprising removing the entry from the transaction log after the contract object is created.

74. (Cancelled)

75. (Currently Amended) Computer-readable media according to claim 74, further comprising software to remove the entry from the transaction log after the contract object is created.

76. (Cancelled)

77. (Currently Amended) A computer-implemented method according to claim 17, wherein determining a relationship between the ~~first-object~~ file and the ~~second-object~~ collection includes determining the relationship between the ~~first-object~~ file and the ~~second-object~~ collection, the relationship between the ~~first-object~~ file and the ~~second-object~~ collection having been established without the participation of the ~~first-object~~ file and the ~~second-object~~ collection.

78. (Currently Amended) Computer-readable media according to claim 44, wherein the software to determine includes software to determine the relationship between the ~~first-object~~ file and the ~~second-object~~ collection, the relationship between the ~~first-object~~ file and the ~~second-object~~ collection having been established without the participation of the ~~first-object~~ file and the ~~second-object~~ collection.